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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,188	05/15/2001	Helen M. Doherty	113692.34	9327

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EXAMINER

JOHNSON, JERRY D

ART UNIT PAPER NUMBER

1764

DATE MAILED: 11/05/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Ch 08

**Office Action Summary**

Application No.

09/858,188

Applicant(s)

DOHERTY ET AL.

Examiner

Jerry D. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 6) ☐ Other: \_\_\_\_\_

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Welstand et al.

Welstand et al., U.S. Patent 6,383,236, teach an unleaded gasoline fuel which is substantially free of oxygenates, i.e., the fuel contains less than 1.0 weight percent oxygen based on the total weight of the fuel composition, and most preferably contains no oxygen containing compounds. The gasoline fuel also has a Reid vapor pressure of less than 7.5 psi, a sulfur content of less than 30 ppmw, and more preferably less than 20 ppmw sulfur. The fuel also has an aromatic hydrocarbon content greater than 30 volume percent and/or a 50% D-86 Distillation Point greater than 220°F and/or a 90% D-86 Distillation Point greater than 330°F. The gasoline fuel preferably also has an olefin content of 8 volume percent or less, and more preferably 5 volume percent or less (column 2, line 64 to column 3, line 6). In Tables 2 and 3 of Welstand et

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al., fuel compositions anticipating claims 1, 2, 4 and 5 are disclosed (e.g., Fuels B and C of Table 2).

Claims 7, 8, 10, 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welstand et al.

Welstand et al., U.S. Patent 6,383,236, teach an unleaded gasoline fuel which is substantially free of oxygenates, i.e., the fuel contains less than 1.0 weight percent oxygen based on the total weight of the fuel composition, and most preferably contains no oxygen containing compounds. The gasoline fuel also has a Reid vapor pressure of less than 7.5 psi, a sulfur content of less than 30 ppmw, and more preferably less than 20 ppmw sulfur. The fuel also has an aromatic hydrocarbon content greater than 30 volume percent and/or a 50% D-86 Distillation Point greater than 220°F and/or a 90% D-86 Distillation Point greater than 330°F. The gasoline fuel preferably also has an olefin content of 8 volume percent or less, and more preferably 5 volume percent or less (column 2, line 64 to column 3, line 6). The gasoline composition is substantially free of oxygenates, and it also exceeds the limits set for at least one, if not more, of the properties regulated by the specifications for Phase 2 reformulated gasoline (column 3, lines 21-25). Welstand et al. teach that when one controls the amount of sulfur to less than 30 ppmw (and more preferably less than 20 ppmw), and in particular controls the amount of sulfur together with olefins to no greater than 8 volume %, it is possible to have flexibility with respect to the other regulated fuel properties in a non-oxygenated fuel without sacrificing low emissions (column 3, lines 30-38). In a preferred embodiment, the unleaded gasoline fuel is substantially free of oxygenates, has a Reid vapor pressure of less than 7.5 psi, a sulfur content of less than 30 ppmw, and more preferably less than 20 ppmw, and a 90% D-86 Distillation Point greater than

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330°F. The fuel also preferably has an olefin content of 8 volume percent or less, and more preferably 5 volume percent or less (column 8, lines 58-65). In another preferred embodiment, the unleaded gasoline fuel is substantially free of oxygenates, has a Reid vapor pressure of less than 7.5 psi, a sulfur content of less than 30 ppmw, and more preferably less than 20 ppmw and a 50% D-86 Distillation Point greater than 220°F. The fuel also preferably has an olefin content of no greater than 8 volume percent, and more preferably 5 volume percent or less (column 8, line 66 to column 9, line 5). It is generally preferred that the T-50 and T-90 characteristics are not high together (column 9, lines 24-25). While Welstand et al. do not disclose fuels having the specifically claimed property values, it would have been obvious to one having ordinary skill in the art at the time the invention was made to follow the above teachings and arrive at the instantly claimed compositions.

Claims 3, 6, 9, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welstand et al. as applied to claims 1, 2, 4, 5, 7, 8, 10-12 and 14 above, and further in view of Townsend et al.

Welstand et al. teach unleaded gasoline fuels containing less than 1.0 weight percent oxygen based on the total weight of the fuel composition, but differ from the instant claims in not disclosing the claimed oxygenating compounds. (See, also, Table 3 of Welstand et al. wherein fuel compositions having 0.25 to 0.75 wt % oxygen are disclosed).

Townsend et al., United States Statutory Invention Registration H1305, teach reformulated gasoline compositions containing an oxygenate selected from, *inter alia*, the instantly claimed oxygenates (column 4, lines 4-26).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to select an oxygenating compound as taught by Townsend et al., including the instantly claimed compounds, as the oxygenating component in the fuel composition of Welstand et al.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Scott et al.

Scott et al., U.S. Patent 6,290,734, disclose a method for blending unleaded gasoline containing ethanol and having a Reid Vapor Pressure of 8.0 psi or less, and more preferably 7.0 psi or less (column 2, lines 41-45). In Table 4 of Scott et al., specific fuel compositions are disclosed which anticipate the instantly claimed compositions. See, for example, base fuels 1 and 2 (both with and without ethanol).

Claims 1, 2, 4, 5, 7 and 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by CRC Report No. 477.

Fuels 1 and 2 of CRC Report No. 477 entitled "1973 CRC Fuel Rating Program Part 1: Road Octane Performance in 1973 Model Cars" have the following disclosed properties:

Fuel 1: Sulfur = .005 % by weight, RVP = 6.0, T50 = 220°F, T90 = 330°F, octane = 84, olefin content = 2.0 %. Fuel 1 anticipates claims 1, 2, 4 and 5.

Fuel 2: Sulfur = .005 % by weight, RVP = 5.2, T50 = 213°F, T90 = 304°F, octane = 86.1, olefin content = 18 %. Fuel 2 anticipates claims 7 and 8.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

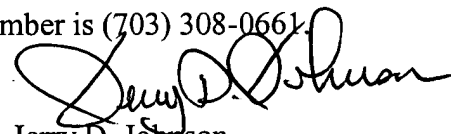
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (703) 308-2515.

The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Caldarola can be reached on (703) 308-6824. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read "Jerry D. Johnson", is written over the printed name and title.

Jerry D. Johnson  
Primary Examiner  
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JDJ